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Nurses' Knowledge Regarding Postpartum Psychosis in Dhaka Medical College Hospital, Dhaka

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Abstract: Postpartum psychosis (PPP) is a rare but severe psychiatric emergency affecting mothers shortly after childbirth, with significant implications for maternal and infant health. This descriptive cross-sectional study aimed to assess nurses' knowledge regarding PPP in Dhaka Medical College Hospital, Bangladesh. A total of 50 nurses from obstetric wards were selected using convenience sampling. Data were collected through a structured questionnaire covering socio-demographic characteristics, conceptual understanding, risk factors, signs and symptoms, management, complications, and preventive strategies of PPP. Findings revealed that 42% of respondents had limited knowledge of the concept, while knowledge of management (76%) and complications (83%) was comparatively higher. Overall, 26% had limited knowledge, 30% moderate, 16% adequate, and 28% excellent knowledge, with a mean knowledge score of 46.92. Limited training and experience with PPP were noted. The study highlights the need for structured maternal mental health education, practical exposure, and continuous professional development to enhance nursing competence in detecting and managing postpartum psychosis.

Keywords: Postpartum Psychosis, Nurses' knowledge, Maternal Mental Health.

INTRODUCTION

Background and Significance of the study

Postpartum Psychosis (PPP) is a psychiatric emergency that can affect the health and life of mothers, infants, and families. It is a 'short psychotic illness' that classified as one of the syndromes associated with pregnancy or puerperium that includes significant mental and behavioural characteristics, such as delusion, hallucinations or other psychotic symptoms (Oltmanns,2021). It is also known as puerperal psychosis or postnatal psychosis (National Health Service, 2023). Peak timing of onset is from days 1 to 14 with a duration of weeks to months. It is considered that typical onset is 3 to 10 days after birth where women have already been discharged from the hospital (Friedman *et al.*,2023).

According to Perry et al, 2021, Postpartum psychosis is a severe postnatal mental illness, reported to affect around 1–2 for every 1000 childbirths worldwide. A systematic review of recent study found an incidence range of 0.89 and 2.6 in 1000 births across several countries, and one study reported prevalence to be 5 in 1000 births (Vanderkruik *et al.*,2017, as cited in Friedman.,2023).

The exact cause of PPP remains unclear, however the following psychosocial and neurobiological factors play a role in the onset of postpartum psychosis: (i) obstetric factors such as mode of delivery, sex of the infant and complications of pregnancy or delivery (ii) psychological and social stressors, (iii) sensitivity to hormone changes that occur in relation to labour and parturition, iv) sleep and circadian rhythm disruption occurring within the perinatal period, (v) immunological factors and (vi) genetic factors (Perry et al, 2021).

Insomnia, mania, and depression are among the early symptoms of PPP. Delirium, disorientation, confusion, depersonalization as well as derealization are features observed in mothers suffering from the condition (Bergink et al 2015 as cited in Olundegun,2021). The patient refuses her meals and loses interest her baby. She sometimes talks of certain members of her family wanting to harm her (Basavanthappa 2019). Anxiety, rapid mood changes, paranoia, withdrawal, agitation, and restlessness are some of the other symptoms observed in postpartum psychosis (Royal College of Psychiatrists, RC PSYCH 2020).

Diagnosis relies on clinical evaluation by a healthcare provider, guided by the DSM-5 diagnostic criteria. The differential diagnosis includes infection, thyroid disease, parathyroid disease, substance-related symptoms, blood loss, tumour, auto-immune disorder or anoxia. Risks of inadequately treating PPP includes accidents, suicide, infanticide, homicide and neglect. Evidence suggests that homicidal thoughts are more common in PPP, yet infanticide is rare occurring in between 1 and 4.5% of cases. Patients also more frequently report thoughts of self-harm (Friedman *et al.*,2023).

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Primary prevention includes considering the established risk factors, including the history of bipolar disorder or postpartum psychosis. Secondary prevention includes early detection. Finally, tertiary prevention includes the management of postpartum psychosis (Lucky *et al.*,2019). Treatment plans include considering suicide and infanticide risk, ruling out medical causes, hospitalization with a safe plan for the infant, psychoeducation of the patient and family, and medication management (Friedman *et al.*,2019).

In Bangladesh, there is very limited information available about postpartum psychosis. The researchers have found only one study regarding postpartum psychosis in Bangladesh. Nurses' knowledge is essential for improving patient care and mental health of the postnatal mother. Nurses play a crucial role in the care and treatment of postpartum psychosis by utilizing their knowledge, they can communicate more effectively with patients and their families during treatment. This result will assist to identify areas for improvement of mental health of postpartum mothers.

Problem statement

Postpartum psychosis (PPP) is a rare but severe psychiatric emergency that occurs shortly after childbirth, posing serious risks to maternal and infant health. Despite its critical implications, limited research exists on nurses' knowledge regarding PPP in Bangladesh. Nurses are often the first healthcare providers to identify early warning signs, yet many lack formal training and practical experience in managing this condition. Studies indicate gaps in understanding of risk factors, conceptual knowledge, and preventive strategies. This knowledge deficit may hinder timely recognition and appropriate management of PPP, compromising patient safety. Therefore, assessing nurses' knowledge is essential to improve maternal mental healthcare and inform targeted educational interventions.

Justification

Postpartum psychosis (PPP) is an uncommon yet serious mental health condition that usually appears within the first few weeks after childbirth, posing significant threats to both mother and child. Globally, its occurrence is estimated between 0.89 and 2.6 cases per 1,000 births, and failure to recognize or treat it promptly can result in considerable complications (Perry *et al.*, 2021; Friedman *et al.*, 2023). The condition develops rapidly and can involve severe symptoms such as hallucinations, delusions, mood disturbances, and confusion, alongside potential risks of self-harm or harm to the newborn. Although less frequent than postpartum depression, its sudden onset and high-risk nature make early detection and immediate intervention critical. Nurses, who are in continuous contact with postpartum mothers, play a key role in identifying early signs and initiating timely care. Nevertheless, research suggests that many maternity nurses may lack sufficient understanding of PPP, including its causes, warning signs, and preventive strategies (Chouchane *et al.*, 2025).

In Bangladesh, studies specifically addressing PPP are extremely scarce. Research on postpartum depression has identified significant prevalence and risk factors, such as a 39.4% prevalence among women living in Dhaka's urban slums (Mamun *et al.*, 2024), but data on PPP incidence and characteristics remain limited. In addition, nurses often receive little formal education or clinical training in maternal psychiatric conditions, which further limits their ability to detect and manage PPP effectively. This gap in knowledge and exposure represents a significant challenge for ensuring safe and evidence-based care for postpartum women.

Evaluating nurses' knowledge about PPP is therefore essential. A comprehensive understanding should include the definition of the disorder, its risk factors, clinical signs, management approaches, potential complications, and preventive measures. Well-informed nurses can identify mothers at risk, educate families, follow safety protocols, and participate in collaborative care. Enhanced knowledge also allows nurses to advocate for timely interventions, helping to prevent long-term psychiatric complications, difficulties in mother-infant bonding, and social or family disruptions.

Moreover, assessing knowledge gaps can guide the development of targeted training programs, educational initiatives, and policy recommendations to integrate maternal mental health more effectively into nursing education. Since nurses spend substantial time with postpartum mothers, their preparedness directly affects maternal and infant outcomes. By highlighting strengths and areas needing improvement, this study aims to support the implementation of evidence-based strategies that improve maternal mental healthcare and ensure safer postpartum experiences.

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In conclusion, this research is interested due to the severe consequences of PPP, the limited awareness among nurses in Bangladesh, and the lack of local data. Enhancing nurses' understanding and skills is crucial for early recognition, appropriate management, and better maternal-infant health outcomes, making this study highly relevant in the Bangladeshi healthcare context.

Research Question

What is the level of Nurses' Knowledge regarding Postpartum Psychosis in Dhaka Medical College Hospital, Dhaka?

Research Objectives:

General objective

To assess the level of Nurses' Knowledge regarding Postpartum Psychosis in Dhaka Medical College Hospital, Dhaka.

Specific Objectives

- To assess the level of existing knowledge of nurses regarding concept (meaning, risk factors, sign & symptoms) of Postpartum Psychosis.
- To assess the level of nurses' knowledge regarding management and complication of Postpartum Psychosis.
- To determine the level of nurses' Knowledge regarding preventive approaches of Postpartum Psychosis.
- To state the socio-demographic characteristics of respondents.

Research Variables

Demographic variables

- Age.
- Religion.
- Marital status.
- Professional Educational Qualification.
- Years of Clinical Experience.
- Current Department.
- Previous Training on Maternal Mental Health
- Experience of caring for a woman with Postpartum Psychosis.

Knowledge related variables

- Concept (meaning, risk factors, sign & symptoms) of Postpartum Psychosis.
- Management of Postpartum Psychosis.
- Complication of Postpartum Psychosis.
- Prevention of Postpartum Psychosis.

Operational Definition

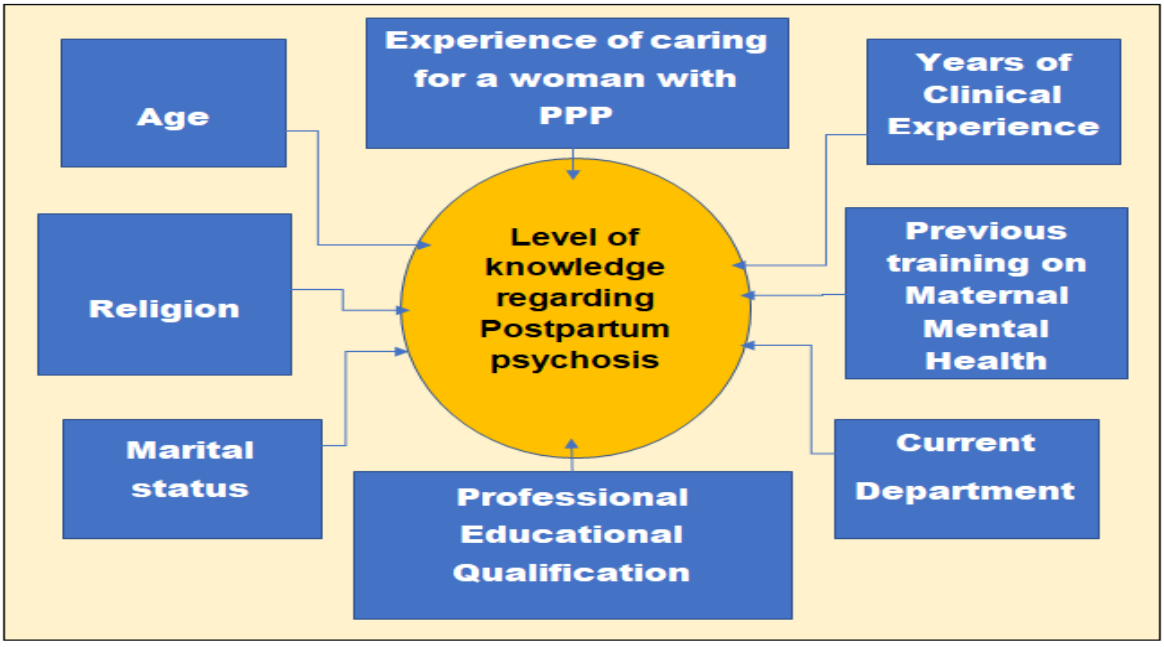
Nurse:

In this study, Nurses refers to the respondents who have completed a basic nursing education and authorized by BNMC and providing care of the mothers in obstetric wards and who are present and willing to participate in this study during data collection period.

Knowledge:

In this study, knowledge refers to the cognition and understanding of the nurses regarding postpartum psychosis including the concept (meaning, risk factors, sign & symptoms), management, complication and prevention. This knowledge will be assessed by knowledge related questionnaire.

A Study Framework (Own developed)



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Literature Review

Review of literature is one of the most important steps in the research process. It is an account of what is already known about a particular phenomenon (Sharma, 2016). In this study researchers studied and reviewed the following articles and literature relevant to the research title. Researchers also develop a clear understanding about the overview and nurses' knowledge regarding postpartum psychosis.

Concept of postpartum psychosis

Postpartum psychosis or puerperal psychosis is a rare gynaecologic or obstetric disease characterized by the sudden onset of psychiatric symptoms during the first weeks after childbirth which presents clinical features such as mood changes, depression, anxiety, delusions, and hallucinations (Orphanet 2020). Postpartum psychosis refers to a range of conditions, including postpartum mania, psychosis, psychotic depression and mixed affective states that develop shortly after giving birth (Osborne 2018).

Postpartum Psychosis is divided into three types including depressive PPP, manic PPP, and mixed/atypical PPP. A latent class analysis found three subgroups including depressive (41%), manic (34%) and atypical (25%). Atypical presentation, described as a disturbance of conscious-ness and orientation, was less common than previously reported (Sharma *et al.*,2022).

The exact cause is unknown. Organic causes of postpartum psychosis would be Ischemic or haemorrhagic stroke, Electrolyte imbalance such as hyponatremia or hypernatremia, hypoglycaemia or hyperglycaemia, Thyroid or parathyroid abnormalities (hypothyroidism, hyperthyroidism, hypocalcaemia, and hypercalcemia), Vitamin B12 and folate or thiamine deficiencies. However, the associated risk factors to the development of postpartum psychosis includes: Genetic/ hereditary (example: chromosome 16), hormonal changes (example: Oestrogen, Progesterone), family / personal history of mental illness such as bipolar disorder or depressive episodes , lack of social and emotional support, death of a loved one, low sense self-esteem due to a woman's postpartum appearance, feelings of inadequate as a mother, financial problems, major life changes such as moving or starting a new job, poor marital relationship, single parent, childcare stress, prenatal anxiety & depression, low socio economic status, unplanned/ unwanted pregnancy, infant temperament problems, substance abuse, infection (Dani Paul *et al.*,2022).

Sleep deprivation during labour and postpartum is also a risk factors for the onset of PPP, particularly who have previous history of mania induced by sleep loss (Lewis *et al.*,2018). Severe childhood maltreatment and higher intake of daily cortisol (a marker of stress response) in the third trimester of pregnancy predicted relapse in the first 4 weeks postpartum in women at risk of PPP (Hazelgrove *et al.,* 2021). Discontinuation or poor adherence to psychopharmacological treatment during pregnancy is also considered as a risk factor. (Olive-Mas *et al.*,2025).

Canadian researchers, on the other hand, indicate that reduced fertility or infertility treatment is associated with a slightly higher risk of postpartum mental illness, including PPP .A United States analysis found that severe maternal illness during delivery, such as acute myocardial infarction, aneurysm, acute renal failure, amniotic fluid embolism, sepsis, and severe complications from anaesthesia, were associated with an increased risk of acute mental illness within 1 year of hospital discharge (Michalczyk *et al.,* 2023).

Postpartum Psychosis symptoms are varied and can develop rapidly. They often include insomnia, elevated mood, depression, disorientation, auditory, visual and olfactory hallucinations, mood swings, delusions (persecutory, relating), loss of inhibitions, racing thoughts, irritability, thought content disturbances, restlessness, affective instability, confusion, and bizarre behaviour. In addition, patients may experience psychomotor agitation and lack of appetite. Less commonly, Capgras delusions or catatonia are observed in patients with PPP; the prevalence of catatonia is 20% (Michalczyk *et al.,* 2023). A prospective study of 130 women admitted to a mother-baby unit for postpartum psychosis found irritability was the most common symptoms 73% followed by abnormal thought content - 72% and anxiety -71% (V. Sharma *et al.*,2022).

The diagnosis of PPP consists of a history, physical examination, neurological examination, and laboratory tests, including blood count, tox screen, electrolyte levels, glucose, thyroid hormones, blood urea nitrogen (BUN), liver function tests, creatinine, urinalysis, and testing levels of the vitamins B12, folic acid, and thiamine. In the case of febrile patients, urine and

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blood cultures can be considered (Michalczyk *et al.,* 2023).

Incidence & prevalence of Postpartum Psychosis:

According to Perry et al, 2021, Postpartum psychosis is a severe postnatal mental illness, reported to affect around 1–2 for every 1000 childbirths worldwide. A systematic review of recent study found an incidence range of 0.89 and 2.6 in 1000 births across several countries, and one study reported prevalence to be 5 in 1000 births (Vanderkruik *et al.,*2017, as cited in Friedman.,2023).

In context of Bangladesh, A cross-sectional study conducted at Square Hospital's Child Development Centre in Dhaka over a 32-month period from January 2022 to August 2024 screened 7,932 mothers for postpartum psychological problems. They reported an overall incidence of 3.7% (292) at risk of postpartum psychiatric disorders. Among these mothers, 1.24% (98) experienced Baby Blues, 2.03% (161) were diagnosed with postpartum depression and 0.20% (16) postpartum psychosis (Salwa *et al.,* 2024).

Management: Postpartum psychosis is a condition which is usually is under-diagnosed. On a regular post-natal visit to the obstetrician as a part of regular screening for complications, assessment of postnatal depression, postnatal blues and postnatal psychosis can be done to detect the onset of postpartum psychosis and help in managing it at a much early stage. Management of the patient with post-partum psychosis relies on the underlying morbidities, mood disorders, current symptom presentation, response to previous treatments sort, side effects and adverse effects caused by drug administered then, the preference of the mother to feed her baby. Mothers with postpartum psychosis need physical and neurologic examination and basic medical workup like complete blood count, metabolic profile and urine toxicology screening (Dani Paul *et al.,*2022). There are currently no guidelines for treatment of PP, and its treatment depends on the cause of psychosis onset. (Michalczyk *et al.,*2023). The physical treatment that can be given include anti-manic agents, atypical antipsychotics, and ECT. Lithium was found to be more effective for both acute and maintenance treatment. According to the guidelines of the World Health Organization (WHO), there is an urgent need for medical services for maternal mental disorders. Multidisciplinary treatment with early hospitalization and psychiatric consultation is crucial for successful and rapid recovery. Treatment may be initiated in the perinatal period or only in the postnatal period. There are no randomized trials of drugs in the acute treatment of manic/mixed or depressive episodes with psychosis in the postpartum period. Atypical antipsychotics and lithium are commonly recommended for acute treatment of postpartum psychosis, used a four-step approach for acute and maintenance treatment of patients who were hospitalized in the four weeks after delivery for first onset of psychosis (Sharma et.al,2022). PP treatment should take into account coexisting mental illnesses, personality disorders, past trauma, and post-traumatic stress disorder (PTSD). A multidisciplinary approach is necessary. Cognitive-behavioural therapy, psychoeducation, positive psychosis psychotherapy, acceptance and commitment therapy, or therapeutic yoga are used as an adjunct to pharmacotherapy (Michalczyk *et al.*,2023)

The study stated that Complications of postpartum psychosis includes suicide, infanticide, homicidal thoughts, lack of a normal mother and infant bond i.e., difficulty in caring for the baby and marital and family problems (Dani Paul *et al.*,2022).

Prevention Strategies to Postpartum psychosis

Women at risk of postpartum psychosis particularly those with a personal or family history of bipolar disorder or prior PPP, benefit most from strategies aimed at relapse prevention. Early risk identification, preconception counselling, and careful monitoring during pregnancy are key to reducing adverse outcomes. Preconception psychiatric evaluation provides essential guidance for perinatal treatment planning in women with known bipolar disorder or past PPP. Initiating pharmacological prophylaxis immediately after delivery remains the most effective intervention to prevent relapse (Jairaj *et al.*,2023).

Knowledge related to Postpartum Psychosis

A descriptive type of cross-sectional study was conducted at Nigeria (Samphina Academy,2024). The aim of the study was to study the knowledge of nurse-midwives about the prevalence. assessment and treatment of postpartum depression. The study consisted of 212 respondents. An electronic questionnaire was Used to collect data. Data were analyseda by using descriptive statistics. The results of the study showed that in Nigeria, there were gaps in the knowledge of midwives and nurses about the

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prevalence, assessment and treatment in the prenatal and postpartum periods and almost 90% of Nigeria respondents did not attend additional training courses on postpartum depression.

A study was conducted in A.G.M Ruth Deichmann hospital, Visakhapatnam, India. One of the objectives of that study was to assess the level of knowledge regarding postpartum psychosis among registered nurses. One group pretest post-test research design was used. Purposive sampling technique was used to select 60 RN who were posted in postnatal ward. A self-administered questionnaire was used to collect data and to find out the effectiveness of STP. Descriptive and inferential statistics were used to determine the association between the pretest scores and selected demographic variables. Result showed that majority (70%) of the RN had inadequate knowledge, 25% had moderate knowledge and only 5% had adequate knowledge (Prasanna *et al.*,2016).

RESEARCH METHODOLOGY

This chapter contains description of research design, study period, study place, population, sample size, sampling technique, sample selection criteria, research instrument, ethical consideration, data collection procedure, data analysis & interpretation and grading criteria.

Study Design

A quantitative approach, descriptive type of cross-sectional study design with face-to-face interview was carried out to assess Nurses' Knowledge regarding Postpartum Psychosis in Dhaka Medical College Hospital, Dhaka.

Study Place

Dhaka Medical College Hospital (DMCH) is the oldest tertiary-level hospital located at Bakshi bazar area of the city, close to the University of Dhaka in Bangladesh. This hospital started its glorious journey on 10 July 1946 as 200 bedded field hospital for the British Indian armed forces and upgraded to a 1080 bedded hospital in 1972. Subsequently, it has been converted into 1800 to 2600 (300 bedded including Burn and Plastic Surgery Unit) bedded tertiary-level hospital. It has 42 departments with over 5000 patients at OPD, 500 admissions, and 1300 emergency visits per day. It serves a large number of patients from diverse socioeconomic and cultural backgrounds, ensuring a variety of cases and experiences relevant to postpartum psychosis. The hospital employs a significant number of skilled nurses, midwives, and healthcare providers, making it an ideal setting to assess their knowledge and skills.

Study Period

The study period was from January to December 2025.

Study Population

The population in this study consisted of all Nurses who were working in Antenatal ward, Labor ward, Postnatal ward, post operative ward, Eclampsia ward, Feto-maternal high-risk ward in Dhaka Medical College Hospital. The total number of study population was 160.

Sample Size

The total number of populations comprised 160 nurses. Due to our time bound, more than 25% target population was selected as the sample, resulting in a sample size of 50. The sample size of 50 (fifty) was determined based on 31% proportional estimation from the total number of population (N = 160).

Sampling Technique

A non-probability type of convenient sampling technique adopted for selecting the sample of the study. According to Arikunto (2010: p.112), if the population is more than 100, (10-15) %, (20-25) % or more from the total population can be taken as sample. In this study, researchers selected 31% of the population. The total population was 160 Nurses, so the sample was 50 selected according to the inclusion criteria. Convenient sampling involves using respondents who were "convenient" to the researchers.

Sample Selection Criteria

Inclusion criteria

- Respondents who were working at obstetric wards in Dhaka Medical College Hospital (DMCH).
- Respondents who participated voluntarily in the study.
- Respondents who were available during data collection period.

Exclusion Criteria

- Respondents who did not meet the inclusion criteria and who were not physically fit.

Instrument Development

A structured questionnaire was developed by the researchers based on the study objectives and a review of relevant literature on postpartum psychosis and maternal mental health. The tool was designed to assess nurses' knowledge of postpartum psychosis in a clear and systematic

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way. It consisted of two sections. The first section collected demographic information, including age, religion, marital status, educational level, years of experience, working department, prior training in maternal mental health, and experience caring for women with postpartum psychosis.

The second section assessed knowledge across six areas: concept, risk factors, signs and symptoms, management and nursing care, complications, and prevention of postpartum psychosis. The questionnaire included 35 close-ended multiple-choice questions. Each correct answer was awarded two marks, while incorrect answers received zero, allowing easy measurement of knowledge levels.

The questionnaire was developed using evidence-based sources such as WHO guidelines, RCPsych materials, and peer-reviewed journals. Simple and clear language was used to ensure understanding and accurate assessment of nurses' knowledge, particularly related to early recognition and safe nursing care.

Validity of the Instrument

The validity of the instrument was examined by 3 (three) experts in related field. Among three experts, One international expert on SRHR & Perinatal health Prof. Kerstin Erlandson. PhD & Prof. Christina Pederson. from Dalarna University, Sweden. Another one our respected advisor Ratna Moni. SRHR &Perinatal health. And then the student researchers modified the instruments based on experts' opinion.

Reliability of the Instrument

The instrument pre-tested on 10 (ten) Nurses at Shaheed Suhrawardy Medical College Hospital in Dhaka with the same characteristics of the targeted respondents to check acceptancy and consistency of the instrument. After reviewing of pretesting results, the researcher made the necessary corrections for finalizing data collection procedure.

Ethical Consideration

Written permission: Written permission was obtained from the Principal, College of Nursing, Mohakhali, Dhaka and concerned hospital authority for data collection to conduct the study.

Informed consent: Written consent was taken from the respondents with their signature after explaining the study purpose and ensured them that this information was used for academic purpose only.

Voluntary Participation: Researchers ensured the respondents that they have freedom to participate in this study and they allowed to withdraw themselves any time from the study.

Confidentiality and Anonymity: Researchers ensured them their confidentiality and anonymity were maintained strictly regarding the obtained information and ensured them not to publish anywhere. The collected data kept under lock and key in safe place.

Data collection procedure

A structured questionnaire was prepared for face-to-face interview in English for data collection. Data collection was started after obtaining permission from the director of Dhaka Medical college Hospital. It was collected by using structured questionnaire (closed ended) method at obstetric wards of that hospital from 8.00 am to 2.00 pm on each official day for given data collection period. The purpose of the study was explained to the participants, and written consent was obtained from them. The participant took about 30 minutes to complete the questionnaire.

Data Management

Collected data was checked, organized, coded and edited manually for verifying the omission, inconsistencies and improbability and then it was placed in the master sheet to facilitate the analysis processing.

Data Analysis and Interpretation

All collected data was analysed by using Microsoft Xcel and computer. Descriptive statistics such as frequency and percentages mean and standard deviations was used to describe the subject characteristics. The results were presented by using tables, pie and column charts with interpretation.

Scoring and Grading

The nurses' knowledge of postpartum psychosis (PPP) was measured using a structured questionnaire with 35 multiple-choice items. Each correct answer received 2 marks, and incorrect answers received 0, ensuring a simple and objective scoring method. Total scores were summed and converted into percentages using the formula:

Percentage score = (Obtained score ÷ Total possible score) × 100

Knowledge levels were then categorized as limited, moderate, adequate, or excellent. This system allowed clear assessment of overall

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knowledge and highlighted areas where further training or education is needed to improve nurses' competence in identifying and managing postpartum psychosis.

Percentage Range	Knowledge Level
80–100%	Excellent
70–79%	Adequate
60–69%	Moderate
<60%	Limited

RESULTS

This chapter provides a detailed description of the results with appropriate interpretation according to the objectives and variables of this study. The results were presented by simple frequency, percentage, and mean in tables and charts.

Socio-Demographic findings

Table 1: Distribution of respondents by age group n=50

Variable	Frequency (*F*)	Percent (%)
20-30 years	7	14
31-40 years	28	56
41-50 years	6	12
Above 50 years	9	18
	n=50	100
*Mean age 38.74 years Standard deviation=8.82 years		

Description: The above table shows that 14% respondents were within the range of 20-30 years, 56% between 31-40 years, 12% between 41-50 years and 18% respondents above 50 years. The mean age of respondents was 38.74 years.

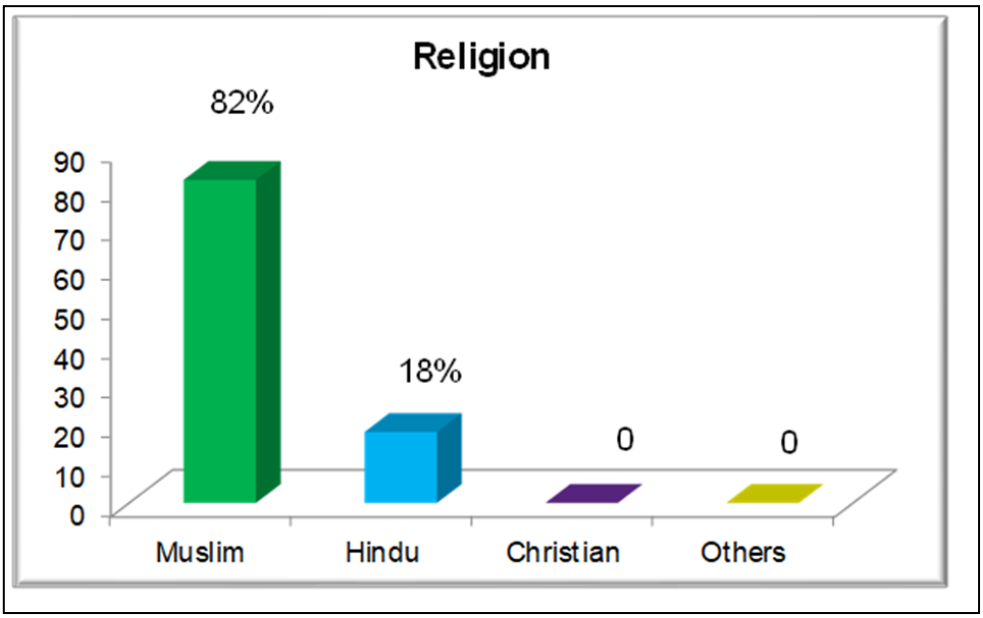

Figure 1: Distribution of the respondents by Religion

Description: The above column chart shows the religious affiliation of respondents. Out of 50 respondent 82% were Muslim, 18% were Hindu, there were no Christian and Buddhist.

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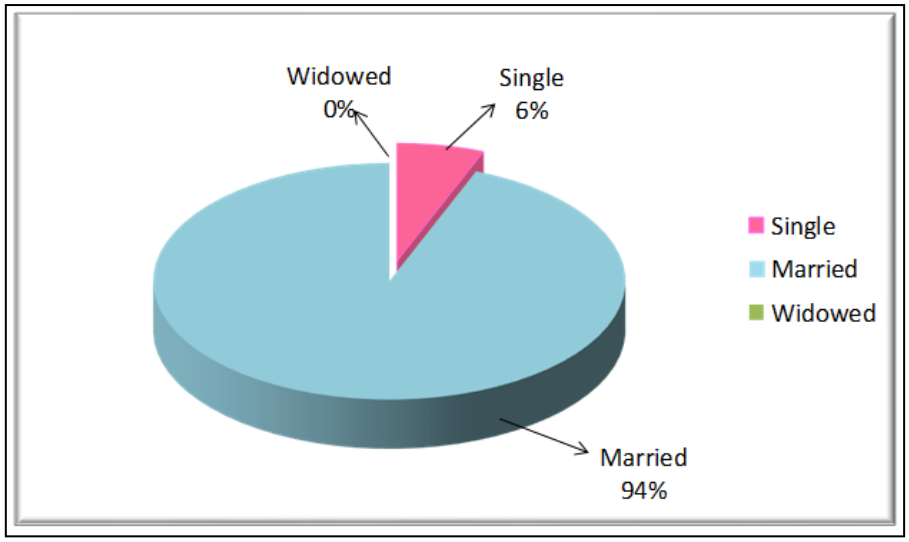

Figure 2: Distribution of the respondent's marital status

Description: The above pie chart showed the majority of the respondents 94% were married and rest of 6% were unmarried.

Table 2: Distribution of respondents by Professional educational qualification n=50

Variable	Categories	Frequency(F)	Percent (%)
Educational qualification	Diploma in Nursing	15	30
	B.Sc. in Nursing	22	44
	MPH/M.Sc. in nursing	13	26
	Other	-	-
Total		50	100

Description: The data presents the professional educational qualification of 50 respondents. Among the respondents 30% have Diploma in Nursing, 44% B.Sc. in Nursing, 26% MPH/ M.Sc. in Nursing.

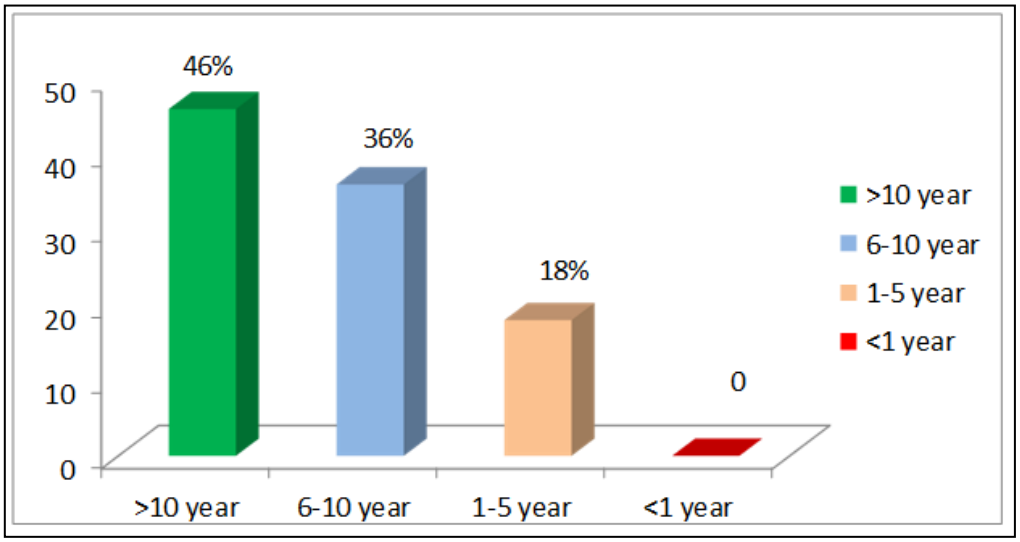

Figure 3: Distribution of respondents by Years of Clinical Experience

Description: The above column chart shows the clinical experience of respondents. Out of 50 respondents 46% have above 10 years, 36% have 6-10 years, 18% have 1-5 years of experience.

Table 3: Distribution of respondents by current department n=50

Variable	Categories	Frequency(*f*)	Percent (%)
Current department	Obstetrics & Gynaecology	50	100
	Psychiatry	_	_

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	General ward	_	_
	Other	_	_
Total		50	100

Description: The above table showed that the total (100%) respondents are working at Obstetrics & Gynaecology department of the study.

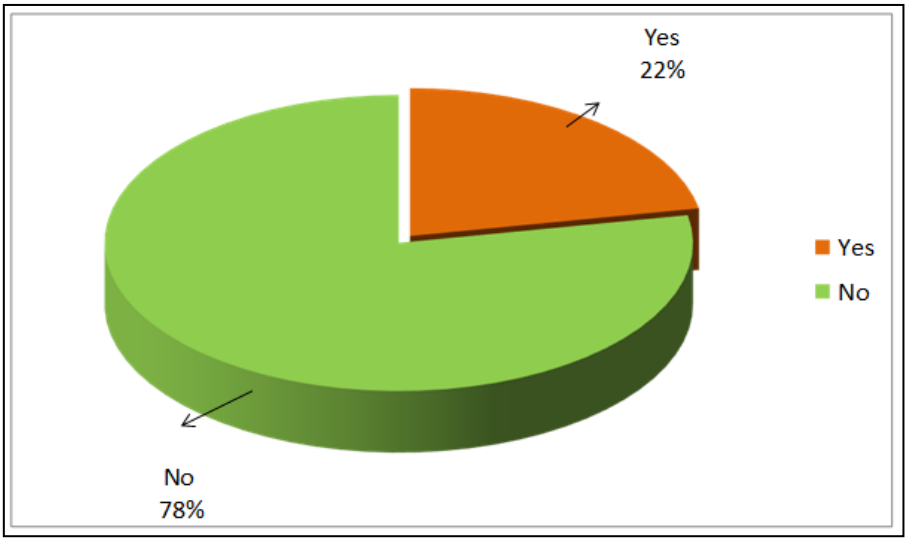

Figure 4: Distribution of respondents by Previous Training on Maternal Mental Health

Description: The above pie chart represents that only 22% respondents had training on Maternal Mental Health and the maximum 78% respondents didn't have any training on Maternal Mental Health.

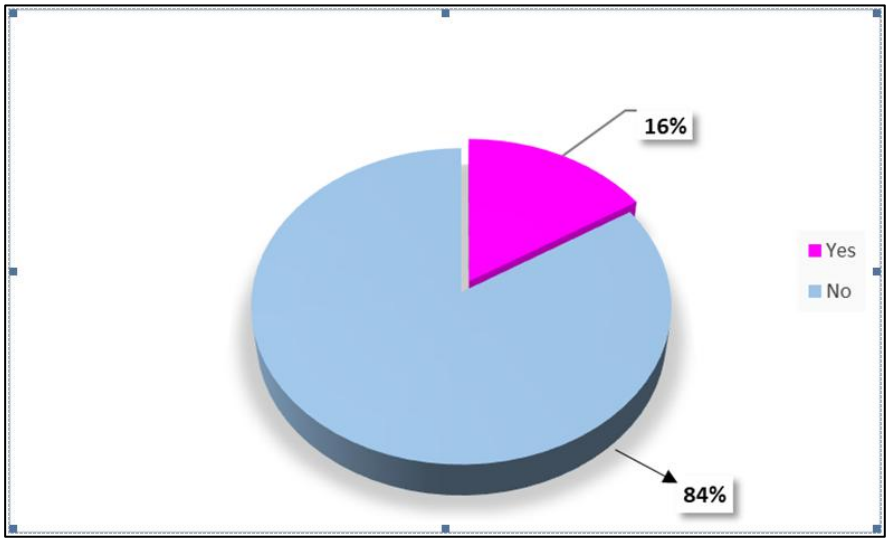

Figure 5: Distribution of respondents by cared of a woman with postpartum psychosis

Description: The above pie chart represents that only 16% of respondents provided care to a woman with postpartum psychosis and maximum 84% of respondents never cared for a woman with postpartum psychosis.

Knowledge Regarding Postpartum Psychosis

Table 4.1: Distribution of Nurses' Knowledge regarding concept of postpartum Psychosis n=50

SL.NO	Meaning	Item	Correct Answer		Incorrect Answer	
			(f)	(%)	(f)	(%)
01		Postpartum psychosis is	17	34	33	66
02		Approximate incidence	24	48	26	52
03		Postpartum psychosis usually occurs	37	74	13	26
04		Most strongly associated with	15	30	35	70

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05		Typical onset	39	78	11	22
06		More common in	31	62	19	38

Description: above table shows that among 50 respondents 54.3% provided correct answer and 45.7% provided incorrect answer regarding meaning of postpartum Psychosis.

Table 4.2: Risk factors

SL.NO	Risk factors	Item	Correct Answer		Incorrect Answer	
			(f)	(%)	(f)	(%)
07		Strongest predictor:	11	22	39	78
08		Situations that raise the chance of this happening	38	76	12	24
09		Obstetric factor associated with risk	17	34	33	66
10		Substance abuse contributes to	37	74	13	26
11		Family factor increasing risk	42	84	08	16
12		Mother most at risk	30	60	20	40

Description: above table shows that among 50 respondents 58.3% provided correct answer on the other hand 41.7% provided incorrect answer regarding risk factors of postpartum Psychosis.

Table 4.3: Sign & symptoms

SL.NO	Sign & symptoms	Item	Correct Answer		Incorrect Answer	
			(f)	(%)	(f)	(%)
13		Most common hallucination type	31	62	19	38
14		Disorganized speech indicates	37	74	13	26
15		Early warning sign	39	78	11	22
16		Severe cases may	43	86	07	14
17		Differentiates from depression	44	88	06	12
18		Common behavioral feature	26	52	24	48

Description: above table shows that among all of the respondents 73.3% provided correct answer on the other hand 26.7% provided incorrect answer regarding sign & symptoms of postpartum Psychosis.

Table 5: Distribution of respondents by overall knowledge regarding concept of Postpartum Psychosis based on grading criteria

Variables	Categories	*f*	*%*	Total marks
Excellent	80-100%	9	18	280
Adequate	70-79%	11	22	292
Moderate	60-69%	9	18	210
Limited	<60	21	42	334
		n=50	100	1116
*Mean score=22.32 (limited)				

Description: The findings revealed respondent's overall knowledge regarding concept Postpartum Psychosis. Among 50 respondents 42% of the respondents had limited knowledge, 18% had moderate knowledge, 22% had adequate knowledge and 18% had excellent knowledge regarding concept of Postpartum Psychosis. The mean knowledge of respondents was 22.32.

Table 6: Distribution of Nurses' Knowledge regarding Management & Nursing Care of Postpartum Psychosis n=50

SL.NO	Item	Correct Answer		Incorrect Answer	
		(f)	(%)	(f)	(%)
19	First-line treatment	31	62	19	28
20	Severe cases therapy	35	70	15	30
21	Nurses' roles include	36	72	14	28
22	Mothers should	42	84	08	16

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23	Nurse education to family	41	82	09	18
24	Best nursing action during acute psychosis	43	86	07	14

Description: above table shows that among 50 respondents 76% provided correct answer on the other hand 24% provided incorrect answer management and nursing care of postpartum Psychosis.

Table 7: Distribution of Nurses' Knowledge regarding Complications of Postpartum Psychosis n=50

SL.NO	Item	Correct Answer		Incorrect Answer	
		(f)	(%)	(f)	(%)
25	Untreated postpartum psychosis may result in	45	90	05	10
26	Recurrence risk in future pregnancies	40	80	10	20
27	Long-term risk if untreated	46	92	04	08
28	Preventable complication with early management	35	70	15	30

Description: above table shows that most of the respondents 83% provided correct answer on the other hand 17% provided incorrect answer regarding complications of postpartum Psychosis.

Table 8: Distribution of Nurses' Knowledge regarding Prevention of Postpartum Psychosis n=50

SL.NO	Item	Correct Answer		Incorrect Answer	
		(f)	(%)	(f)	(%)
29	Preventive measures for postpartum psychosis are best started	33	66	17	34
30	Nurses can help prevent postpartum psychosis by	40	80	10	20
31	Which of the following is a protective factor against postpartum psychosis	37	74	13	26
32	Early identification of high-risk mothers includes	41	82	13	26
33	The nurse's first action if she suspects postpartum psychosis	37	74	13	26
34	Psychoeducation for family should include	30	60	20	40
35	Preventing return in future pregnancies includes:	23	46	27	54

Description: above table shows that among 50 respondents 68.85% provided correct answer on the other hand 31.15% provided incorrect answer about Prevention of postpartum Psychosis.

Table 9: Distribution of respondents by overall knowledge based on grading criteria n=50

Variables	Categories	*f*	*%*	Total marks
Excellent	80-100%	14	28	838
Adequate	70-79%	8	16	426
Moderate	60-69%	15	30	686
Limited	<60	13	26	396
		n=50	100	2346
*Mean score=46.92 (Limited)				

Description: The findings revealed respondent's overall knowledge regarding Postpartum Psychosis. Among 50 respondents 26% of the respondents had limited knowledge, 30% had moderate knowledge, 16% had adequate knowledge and 28% had excellent knowledge regarding Postpartum Psychosis. The mean knowledge of respondents was 46.92.

DISCUSSION

Discussion of Socio-Demographic Findings

The socio-demographic profile of the respondents illustrates the characteristics of the nursing workforce included in the study. The age distribution shows that 14% of the respondents were within the age group of 20–30 years, whereas the majority, 56%, were between 31–40 years. Another 12% belonged to the 41–50 years age group, and 18% were above 50 years of age. The mean age of the respondents was 38.74 years, indicating that most participants were mid-career nurses with substantial professional exposure. This age pattern suggests that the sample consisted largely of experienced professionals who are likely to have long-term involvement in clinical care.

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In terms of religious affiliation, the study revealed that 82% of the respondents were Muslim and 18% were Hindu. There were no respondents from Christian or Buddhist communities. This distribution reflects the common religious composition of the nursing workforce in many public-sector healthcare facilities.

The marital status of the participants showed that a large majority, 94%, were married, while only 6% were unmarried. This finding suggests that most respondents had family responsibilities alongside their professional duties.

The educational background of the participants indicates variation in professional qualifications. Among the 50 respondents, 30% had completed a Diploma in Nursing, 44% held a Bachelor of Science in Nursing (B.Sc.), and 26% had attained a Master of Public Health (MPH) or Master of Science in Nursing (M.Sc.). This shows that the majority of the respondents had higher academic preparation beyond diploma level.

With regard to clinical experience, 46% of the respondents reported more than 10 years of work experience, 36% had 6–10 years, and 18% had 1–5 years of experience. This distribution reinforces the indication that most participants were highly experienced nurses who had been engaged in clinical services for many years. All respondents (100%) were currently working in the Obstetrics and Gynecology department, reflecting the specialized nature of the study.

The findings also highlight gaps in training related to maternal mental health. Only 22% of the respondents reported having received training on Maternal Mental Health, while the majority, 78%, had not undergone any such training. Additionally, only16% of respondents had experience in providing care to women with postpartum psychosis, whereas 84% had never cared for such patients. This indicates limited direct exposure to severe postpartum mental health conditions among the participants.

Discussion of Knowledge Regarding Postpartum Psychosis

The study assessed different dimensions of the respondents' knowledge regarding postpartum psychosis. Concerning the meaning of postpartum psychosis, 54.3% of respondents provided correct responses, while 45.7% gave incorrect answers. This suggests that slightly more than half of the participants were aware of the basic concept of the condition.

Regarding knowledge of risk factors, 58.3% answered correctly and 41.7% incorrectly, indicating that understanding of factors contributing to postpartum psychosis was relatively moderate among respondents. A cross-sectional study among maternity nurses found that although most nurses recognized the postpartum period and early warning signs of postpartum depression, over half lacked knowledge of its risk factors (Chouchane *et al.,* 2025).

Knowledge of signs and symptoms was comparatively better, with 73.3% providing correct responses, while 26.7% answered incorrectly. This shows that most participants were able to identify clinical manifestations associated with the condition.

The overall knowledge related to the concept of postpartum psychosis revealed that 42% of the respondents had limited knowledge, 18% had moderate knowledge, 22% had adequate knowledge, and 18% had excellent knowledge. The mean knowledge score for this category was 22.32, indicating a generally limited understanding of the disorder's conceptual foundations. Another study among nurses and midwives in Saudi Arabia reported substantial gaps in their knowledge about definition, prevalence, symptoms, screening, and treatment of postpartum depression; many felt unprepared to educate mothers about the disorder (Saleh *et al.,* 2020).

Knowledge of management and nursing care showed a stronger pattern, with 76% providing correct answers and 24% giving incorrect responses. This suggests that respondents had better awareness of clinical and nursing responsibilities when dealing with postpartum psychosis. Similarly, knowledge regarding its complications was also high: 83% of the respondents answered correctly, and 17% answered incorrectly, indicating strong awareness of the potential consequences of the condition.

Regarding prevention-related knowledge, 68.85% of respondents provided correct responses, while 31.15% gave incorrect answers. This demonstrates that although preventive knowledge was present among most participants, a sizeable proportion still lacked comprehensive understanding.

Finally, the overall knowledge score on postpartum psychosis indicated that 26% of respondents had limited knowledge, 30% had moderate knowledge, 16% had adequate

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knowledge, and 28% had excellent knowledge. The mean overall knowledge score was 46.92, showing that while some respondents demonstrated strong knowledge, many had only moderate or limited understanding of postpartum psychosis.

In conclusion, the assessment of overall knowledge regarding postpartum psychosis (PPP) among 50 nurses revealed varied levels of understanding. Specifically, 28% of respondents demonstrated excellent knowledge (80–100%), 16% had adequate knowledge (70–79%), 30% showed moderate knowledge (60–69%), and 26% had limited knowledge (<60%), with a mean score of 46.92. These findings indicate that while some nurses possess strong knowledge of PPP, a substantial proportion have only moderate or limited understanding of this critical maternal mental health condition. Similar knowledge gaps have been documented in previous studies, highlighting that healthcare providers often lack adequate awareness and preparedness to identify and manage postpartum psychiatric disorders (Kurtcu & Golbasi, 2014; Karalia *et al.,* 2024). This variability underscores the need for ongoing professional development, targeted workshops, and evidence-based educational interventions to strengthen nurses' competence in recognizing, managing, and supporting women with PPP effectively.

Limitation of the study

- Small sample size, for this reason; there is no generalization of the study for external validity.
- The study place was only one area.
- Some participants were busy during duty hours, which might have affected their responses.
- Due to academic time limitations, in-depth observation was not possible.
- There was no allocated budget for this research project to carry out the study smoothly. Research expenditure was provided of the researchers.

CONCLUSION

The study highlights that the nursing workforce in Bangladesh, particularly those working in obstetrics and gynecology, exhibits varied knowledge levels regarding postpartum psychosis (PPP). While a proportion of nurses demonstrated excellent or adequate knowledge, a substantial number showed moderate to limited understanding, especially regarding the conceptual foundations and risk factors of PPP. Although most respondents were experienced and academically qualified, gaps in maternal mental health training and direct exposure to postpartum psychosis patients were evident. Knowledge of management, complications, and preventive measures was comparatively better, indicating that clinical awareness is stronger than theoretical understanding. These findings emphasize that despite professional experience, targeted education and structured training in maternal mental health are necessary to ensure competent care for women with PPP.

Recommendations:

- Nurses in Bangladesh should receive regular, evidence-based training and workshops on maternal mental health and postpartum psychosis (PPP).
- Nursing education at diploma, B.Sc., and M.Sc. levels should include dedicated modules on maternal mental health and PPP.
- Supervised clinical exposure to PPP cases can enhance nurses' hands-on skills.
- Refresher courses and online programs should be offered to keep nurses updated on best practices in perinatal mental health care.
- Healthcare facilities should implement clear guidelines for early detection, management, and referral of PPP cases.
- Hospitals, nursing associations, and government agencies should work together to raise awareness and strengthen maternal mental health care across the country.

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